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Remarks

In the outstanding Office Action, the Examiner rejected pending claims 1 through 4, 6, 7, 9 through 22, 27, and 28 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,861,729 (Maeda et al.). The Examiner also rejected claims 5 and 8 under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. in view of U.S. Patent No. 5,233,283 (Kennedy). Finally, claims 23 through 26 and 29 through 31 were rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. in view of U.S. Patent No. 5,793,186 (Watabe et al.). Pending claims 1 through 31 have been cancelled, and new claims 32 through 50 entered as noted above. These new claims are fully supported by the application as filed, and are believed to be patentable over the applied prior art for at least the reasons that follow.

Maeda et al. relates to a system for detecting an on-hook/off-hook condition of a portable piece of equipment relative to a charger. Figure 1, for example, shows a portable telephone 2 and a charger 20. The portable telephone 2 as well as the charger 20 comprise a pair of charging terminals 8, 10 and 24, 26, as well as an auxiliary terminal 12/28. The auxiliary terminal 28 in the charger 20 is provided in order to distinguish between two different battery packs used in the mobile phone. As stated in column 2 of Maeda et al. at lines 10 to 13, it is the object of the invention to provide a charger for which can detect and on-hook/off-hook condition even when a nickel-hydrate battery pack is used. As further explained in column 2, lines 42 to 47, and later at column 5, line 38, a distinction can be made by the device between the two battery packs. In the case of a nickel-hydrate battery pack, a thermistor 16 is connected to the auxiliary terminal 12, and in the case of a nickel-cadmium batter pack (as in Figure 2), the auxiliary terminal is grounded.

In contrast to Maeda et al., the invention of claim 32 comprises a sensing contact that detects current flow between the first charging contact and the second charging contact. Thus, in case a liquid film is present between the two contacts, for example, the current flow between the contacts is detectable by the additional sensing contact. The auxiliary terminal of the portable telephone of Maeda et al. does not sense any such current flow, and there is no disclosure in Maeda et al., nor in either of the secondary references, that discloses or suggests such a structure or function. Accordingly, claim 32 is believed to be patentable under both 35 U.S.C. 102 and 103 over the applied prior art. With regard to claim 36, the auxiliary terminal 28 of

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the charger of Maeda et al. is not comparable to the sensing pin recited in the claim. The auxiliary terminal 28 is only suitable for detecting a specific battery pack depending on what is connected to the auxiliary terminal at the mobile telephone - either a thermistor or a ground contact. The auxiliary terminal 28 is not provided to detect any current flowing between the two terminals, and the secondary references neither disclose nor suggest this feature. Thus, claim 36 is also believed to be patentable under both 35 U.S.C. 102 and 103 over the prior art of record. The remaining new claims properly depend from claims 32 and 36, and are therefore similarly in condition for allowance.

If a telephonic conference with the Applicants' undersigned representative would be useful in resolving any remaining matters associated with the present application, the Examiner is invited to contact the undersigned at 651-736-4050. Otherwise, an early notice of allowance for all claims is respectfully solicited.

Respectfully submitted,



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